



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/416,757	10/12/1999	LILA MADOUR	040010-440	6600
27045	7590	05/03/2004	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			GEORGE, KEITH M	
			ART UNIT	PAPER NUMBER
			2663	
DATE MAILED: 05/03/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/416,757

Applicant(s)

MADOUR ET AL.

Examiner

Keith M. George

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This application has been reassigned to examiner Keith M. George, AU 2663.

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8, 9, 11, 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 8, 9, 11, 13 and 14 recites the limitation "the network identity" in line 2 of each of the claims. There is insufficient antecedent basis for this limitation in the claim.

#### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 8, 9, 11 and 13 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Agraharam et al., U.S. Patent 6,407,988, hereinafter Agraharam.

Art Unit: 2663

7. Referring to claim 1, Agraharam teaches mobility support services using mobility aware access networks (title). A "Mobility Aware IP Network" is a wide area network that operates according to Internet Protocol. It differs from a traditional wide area network because it includes "home agents" and "foreign agents" that provide mobility services to mobile hosts (column 3, lines 12-16). Hosts may be one of two types: "mobile hosts" and "stationary hosts." As the name implies, mobile hosts may move among the premises networks while stationary hosts may not. In figure 1, the shown laptop computes are mobile hosts; desktop computers and servers are stationary hosts (column 3, lines 62-67). Mobile hosts register each time they connect to a new premises network (request a second connection with a second data communications network). As part of the registration process, a mobile host determines whether it is in its home network (first data communication network) or a foreign network (second data communication network) (column 4, lines 40-43). Given this background information, figures 2 and 4 will now be used to show the teachings of Agraharam. Figure 4 shows an example of data flow between the mobile host and the stationary host. Both the mobile host and stationary host are located in the mobile host's virtual home network. Initially, privacy is maintained because the stationary host cannot determine where the mobile host actually resides. The stationary host addresses data to the mobile host at its home address. It transmits the data to the home network. The virtual home network routes the data to the home agent (first gateway associated with the first data communication network). The home agent determines the location of the mobile host and routes the message to the mobile host (column 6, lines 37-50). Figure 2 illustrates an exemplary flow of data between a mobile host and another host, called a "correspondent host." The correspondent host addressed data to the mobile host using its home address. Based upon the

Art Unit: 2663

home address, the data is routed to the mobile host's home agent (first gateway associated with the first data communication network). The home agent "tunnels" the data to the foreign agent (second gateway) using the mobile host's care-of-address (establishing a tunnel between a first gateway and second gateway). The foreign agent retransmits the data to the mobile host using the mobile host's temporary foreign address (routing packets by the first gateway over a tunnel to a second gateway and over a second connection based on the acquired gateway address to the mobile device) (column 5, lines 27-44).

8. Referring to claim 2, Agraharam teaches the method described in reference to claim 1 above and also clearly teaches that when a mobile host determines that it is located in a foreign network, it registers with a foreign agent. The mobile host identifies the foreign agent, registers with it and obtains a "care-of" address on the foreign network. Thereafter, either the mobile host or the foreign agent communicate with the home agent and the mobility server providing the mobile host's new care-of-address (an entity in the second data communications network initiates the request for the establishment of a tunnel) (column 4, lines 51-59).

9. Referring to claim 3, Agraharam teaches the method described in reference to claim 1 above where it was clearly shown that the home agent "tunnels" the data to the foreign agent using the mobile host's care-of-address.

10. Referring to claim 4, Agraharam teaches the method described in reference to claim 1 above and has also clearly taught that the mobile hosts register each time they connect to a new premises network (mobile device initiates the request for the second connection) (column 4, lines 40-41).

Art Unit: 2663

11. Referring to claim 8, Agraharam teaches the method described in reference to claim 2 above and also clearly teaches that the care-of-address is provided to the home agent.

12. Referring to claims 9 and 11, Agraharam teaches the method described in reference to claims 2 and 3 above where it is clearly shown that the home agent is a database storing identities of mobile hosts within its network (centralized database). The identity (network address) would be provided by the first gateway to the second gateway in the source address portion of the header, which is essential to packet communications.

13. Referring to claim 12, Agraharam teaches the method described in reference to claim 3 above and also clearly teaches that dynamic movement of a mobile host among foreign networks does not cause a loss of data (column 9, lines 61-62). The steps involved in a host moving among foreign networks are clearly described in reference to figure 8, these steps inherently consume a finite period of time, in order for the data to not be lost during this time, there inherently exists a type of buffers storage to hold the data during the host movement.

14. Referring to claims 13 and 14, Agraharam teaches the method described in reference to claim 4 above and has also been clearly shown to teach that the mobile host provides the home agent with the care-of address identifying the foreign agent and after registering, either the mobile host or the foreign agent communicate with the home agent (column 4, lines 51-59). In order for the foreign agent to be able to communicate with the home agent, it must know the identity of the foreign agent, which could only be obtained from the mobile host.

15. Referring to claim 15, Agraharam teaches the method described in reference to claim 2 above teaches the method described in reference to claim 1 above, which clearly refers to a mobile IP protocol (column 1, lines 21-24).

Art Unit: 2663

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agraharam in view of Turunen, U.S. Patent 6,487,595, hereinafter Turunen. Agraharam teaches the method described in reference to claim 1 above with the possible exception of the first gateway being a Gateway General Packet Radio Services Serving Node (GGSN). Turunen teaches resource reservation in mobile Internet protocol including that the Mobile IP is implemented in either the GGSN or the SGSN to route received data through the corresponding domain (i.e. GPRS or HSCSD) in the GSM network (column 6, lines 37-40). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to include the GGSN or SGSN as taught by Turunen in the method of Agraharam since both clearly teach methods related to Mobile IP. One of ordinary skill in the art would have been motivated to do this in order to route received Mobile IP data in the GSM network (Turunen, column 6, lines 37-40).

***Response to Arguments***

18. Applicant's arguments with respect to claims 1-4 and 8-15 have been considered but are moot in view of the new ground(s) of rejection.

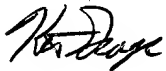
Art Unit: 2663

***Conclusion***

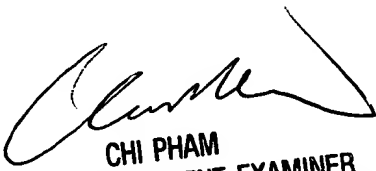
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith M. George whose telephone number is 703-305-6531. The examiner can normally be reached on M-Th 7:00-4:30, alternate F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Keith M. George  
28 April 2004



CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 4/28/07